

LISTING OF THE CLAIMS

X This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims:

1. (Currently Amended) A propeller having a geometric pitch and

the propeller being configured so as to rotate about an axis of rotation (100), when the propeller is driven by a drive shaft of a craft for the purpose of propelling ~~said the~~ craft in a first direction (D1) parallel to the axis of rotation (100) and corresponding to the forward motion direction of the craft, and propelling a fluid in a second general direction (D2) opposite to ~~said the~~ first direction (D1);

the propeller comprising:

a base (2, 15);

a plurality of blades (1, 14),

each blade having a surface defined by a first end (1A, 14A) joined to the base and a second free end (1B, 14B) separating a leading edge (1C, 14C) of the blade from a trailing edge (1D, 14D) of the blade;

the blade being oriented to have ~~having~~ an angle of attack;

the blade having a convex surface suction side (4); extending in a third direction (D3) from the first end (1A, 14A) towards the blade tip (1B, 14B), ~~said the~~ third direction (D3) being a direction in which one section (1E) of the blade ~~extends~~ extending in a plane including the axis of rotation (100) and the blade tip (1B, 14B) ;

the blade having the leading edge (1C, 14C) upstream from the trailing edge (1D, 14D), the leading edge (1C, 14C) and the trailing edge (1D, 14D) substantially extending in ~~said the~~ direction (D3) from the first end (1A, 14A) to the blade tip (1B, 14B);

~~characterized in that~~

the blade tip (1B, 14B) is being an end point separating the leading edge (1C, 14C) from the trailing edge (1D, 14D);

~~the said~~ third direction ~~(D3)~~ forms forming an acute angle α with ~~said~~ the first direction ~~(D1)~~,

$10^\circ \leq \alpha \leq 80^\circ$, in a plane including the axis of rotation ~~(100)~~;

each blade ~~has~~ having a length equal to a length of one blade perpendicular to the axis of rotation divided by $\sin \alpha$; and

having ~~has~~ a surface equal to a surface of one blade perpendicular to the axis of rotation divided by $\sin \alpha$;

for increasing thrust provided by the blade.

2. (Currently Amended) A propeller according to claim 1, ~~characterized in that~~ wherein $20^\circ \leq \alpha \leq 70^\circ$.

3. (Currently Amended) A propeller according to claim ~~2~~ 1, ~~characterized in that~~ wherein $30^\circ \leq \alpha \leq 60^\circ$.

4. (Currently Amended) A propeller according to claim ~~3~~ 1, ~~characterized in that~~ wherein $40^\circ \leq \alpha \leq 50^\circ$.

5. (Currently Amended) A propeller according to ~~claim 4~~ claim 1, ~~characterized in that~~ wherein $\alpha = 45^\circ$.

6. (Currently Amended) A propeller according to ~~any of the preceding claims~~ claim 1, ~~characterized in that it~~ wherein the propeller has two blades ~~(1, 14)~~.

7. (Currently Amended) A propeller according to ~~any of claims 1-5~~ claim 1, ~~characterized in that it~~ wherein the propeller comprises at least three blades ~~(1, 14)~~.

8. (Currently Amended) A propeller according to ~~any of the preceding claims~~ claim 1, ~~characterized in that~~ wherein the blades have an elongated configuration in the direction from the first end ~~(1A, 14A)~~ to the second end ~~(1B, 14B)~~.

9. (Currently Amended) A propulsion system, ~~characterized in that it comprises~~ comprising at least one propeller according to ~~any of claims 1-8~~ claim 1, and a drive shaft ~~(16)~~

joined to the propeller such that the drive shaft (16) ~~can~~ is operable to turn the propeller about its the axis of rotation (100).

10. (Currently Amended) A propulsion system according to claim 9, ~~characterized in that~~ it further ~~comprises~~ comprising a nozzle (9) concentrically located around the axis of rotation (100) of the propeller and laterally enveloping the propeller, ~~said~~ the nozzle having a fluid entry front end and a fluid exit rear end.

11. (Currently Amended) A propulsion system according to ~~any of claims 9 and 10~~ claim 9, ~~characterized in that~~ wherein each blade (14) is joined to the drive shaft or to an element configured as an axial extension of the drive shaft (18, 21) by ~~means of~~ at least one retention brace (19) on the suction side (4) to withstand centrifugal force.

12. (Currently Amended) A propulsion system according to claim 11, ~~characterized in that~~ wherein each blade is joined to the drive shaft or to an element configured as an axial extension of the drive shaft (18, 21) by ~~means of~~ at least two of the retention braces (19).

13. (Currently Amended) A propulsion system according to ~~any of claims 11-12~~ claim 11, ~~characterized in that~~ wherein each retention brace (19) is arranged perpendicularly to the axis of rotation (100) of the propeller.

14. (Currently Amended) A propulsion system according to ~~any of claims 11-13~~ claim 11, ~~characterized in that~~ wherein each retention brace has a symmetrical profile and a shape of a blade in feather position for craft cruising speed.

15. (Currently Amended) A propulsion system according to ~~any of claims 11-14~~ claim 11, ~~characterized in that it forms~~ forming part of a turbojet fan, each blade (14) being joined to a propeller base forming part of the drive shaft ~~constituted~~ comprised of a rotor (21) of the turbojet, each blade (14) being joined to ~~said~~ the rotor (21) also by ~~means of~~ at least two of the retention braces (19).

16. (Currently Amended) A propulsion system according to claim 15, ~~characterized in that the propeller is radially surrounded by~~ further comprising a fairing tube radially surrounding the propeller (22).

17. (Currently Amended) A craft, ~~characterized in that it includes~~ including a propulsion system according to ~~any of claims 9-16~~ claim 9.

18. (Currently Amended) A craft according to claim 17, ~~characterized in that it~~ wherein the craft is an aquatic craft.

19. (Currently Amended) A craft according to claim 17, ~~characterized in that it~~ wherein the craft is a submarine craft.

20. (Currently Amended) A craft according to claim 17, ~~characterized in that it~~ wherein the craft is an aircraft.